e2 studio 2.2.0.13 Release Note:21st November 2013

Supported devices:

CPU	Family	Devices
RH850	F1L	R7F701018xAFP,R7F701023xAFP,R7F701031xAFP,R7F701035xAFP (Debug Support Only)
RL78	D1A	R5F10CGB,R5F10CGC,R5F10CGD,R5F10CLD,R5F10CMD,R5F10CME,R5F10DGC,R5F10DGD,R5F10DGE,R5F10DLD,R5F10DLE,R5F10DMD,R5F10DME,R5F10DMF, R5F10DMG,R5F10DMJ,R5F10DPE,R5F10DPF,R5F10DPG,R5F10DPJ,R5F10TPJ
	F12	R5F10968,R5F1096A,R5F1096B,R5F1096C,R5F1096D,R5F1096E,R5F109AA,R5F109AB,R5F109AC,R5F109AD,R5F109AE,R5F109BA,R5F109BB,R5F109BC,R5F109BD, R5F109BE,R5F109GA,R5F109GB,R5F109GC,R5F109GD,R5F109GE,R5F109LA,R5F109LB,R5F109LC,R5F109LD,R5F109LE,
	F13	R5F10A6A,R5F10A6C,R5F10A6D,R5F10A6E,R5F10AAA,R5F10AAC,R5F10AAD,R5F10AAE,R5F10ABA,R5F10ABC,R5F10ABD,R5F10ABE,R5F10AGA,R5F10AGC, R5F10AGD,R5F10AGE,R5F10AGF,R5F10AGG,R5F10ALC,R5F10ALD,R5F10ALE,R5F10ALF,R5F10ALG,R5F10AME,R5F10AMF,R5F10AMG,R5F10BAC,R5F10BAD, R5F10BAE,R5F10BAF,R5F10BAG,R5F10BBC,R5F10BBD,R5F10BBE,R5F10BBF,R5F10BBG,R5F10BGC,R5F10BGD,R5F10BGE,R5F10BGF,R5F10BGG,R5F10BLC, R5F10BLD,R5F10BLE,R5F10BLF,R5F10BLG,R5F10BME,R5F10BMF,R5F10BMG,
	F14	R5F10PAD,R5F10PAE,R5F10PBD,R5F10PBE,R5F10PGD,R5F10PGE,R5F10PGF,R5F10PGG,R5F10PGH,R5F10PGJ,R5F10PLE,R5F10PLF,R5F10PLG,R5F10PLH, R5F10PLJ,R5F10PME,R5F10PMF,R5F10PMG,R5F10PMH,R5F10PMJ,R5F10PPE,R5F10PPF,R5F10PPG,R5F10PPH,R5F10PPJ,
	G10	R5F10Y14,R5F10Y16,
	G12	R5F10266,R5F10267,R5F10268,R5F10269,R5F1026A,R5F10277,R5F10278,R5F10279,R5F1027A,R5F102A7,R5F102A8,R5F102A9,R5F102AA,R5F10366, R5F10367,R5F10368,R5F10369,R5F1036A,R5F10377,R5F10378,R5F10379,R5F1037A,R5F103A7,R5F103A8,R5F103A9,R5F103AA,
	G13	R5F1006A,R5F1006C,R5F1006D,R5F1006E,R5F1007A,R5F1007C,R5F1007D,R5F1007E,R5F1008A,R5F1008C,R5F1008D,R5F1008E,R5F100AA,R5F100AC,R5F100AD, R5F100AE,R5F100AF,R5F100AG,R5F100BA,R5F100BC,R5F100BD,R5F100BE,R5F100BF,R5F100BG,R5F100CA,R5F100CC,R5F100CD,R5F100CE,R5F100CF,R5F100CG, R5F100EA,R5F100EC,R5F100ED,R5F100EE,R5F100EF,R5F100EG,R5F100EH,R5F100FA,R5F100FC,R5F100FD,R5F100FE,R5F100FF,R5F100FG,R5F100FH,R5F100FJ, R5F100FK,R5F100FL,R5F100GA,R5F100GC,R5F100GD,R5F100GE,R5F100GF,R5F100GG,R5F100GH,R5F100GJ,R5F100GK,R5F100GL,R5F100JC,R5F100JD, R5F100JE,R5F100JF,R5F100JG,R5F100JH,R5F100JJ,R5F100JK,R5F100JL,R5F100LC,R5F100LD,R5F100LE,R5F100LF,R5F100LG,R5F100LH,R5F100LJ,R5F100LK, R5F100LL,R5F100MF,R5F100MG,R5F100MH,R5F100MJ,R5F100MK,R5F100ML,R5F100PF,R5F100PG,R5F100PH,R5F100PJ,R5F100PK,R5F100PL,R5F100SH, R5F100SJ,R5F100SK,R5F100SL,R5F1016A,R5F1016C,R5F1016D,R5F1016E,R5F1017A,R5F1017C,R5F1017D,R5F1017E,R5F1018A,R5F1018C,R5F1018D, R5F1018E,R5F101AA,R5F101AC,R5F101AD,R5F101AE,R5F101AF,R5F101AG,R5F101BA,R5F101BC,R5F101BD,R5F101BE,R5F101BF,R5F101BG,R5F101CA, R5F101CC,R5F101CD,R5F101CE,R5F101CF,R5F101CG,R5F101EA,R5F101EC,R5F101ED,R5F101EE,R5F101EF,R5F101EG,R5F101EH,R5F101FA,R5F101FC, R5F101FD,R5F101FE,R5F101FF,R5F101FG,R5F101FH,R5F101FJ,R5F101FK,R5F101FL,R5F101GA,R5F101GC,R5F101GD,R5F101GE,R5F101GF,R5F101GG, R5F101GH,R5F101GJ,R5F101GK,R5F101GL,R5F101JC,R5F101JD,R5F101JE,R5F101JF,R5F101JG,R5F101JH,R5F101JJ,R5F101JK,R5F101JL,R5F101LC, R5F101LD,R5F101LE,R5F101LF,R5F101LG,R5F101LH,R5F101LJ,R5F101LK,R5F101LL,R5F101MF,R5F101MG,R5F101MH,R5F101MJ,R5F101MK,R5F101ML, R5F101PF,R5F101PG,R5F101PH,R5F101PJ,R5F101PK,R5F101PL,R5F101SH,R5F101SJ,R5F101SK,R5F101SL,
	G14	R5F104AA,R5F104AC,R5F104AD,R5F104AE,R5F104AF,R5F104AG,R5F104BA,R5F104BC,R5F104BD,R5F104BE,R5F104BF,R5F104BG,R5F104CA,R5F104CC, R5F104CD,R5F104CE,R5F104CF,R5F104CG,R5F104EA,R5F104EC,R5F104ED,R5F104EE,R5F104EF,R5F104EG,R5F104EH,R5F104FA,R5F104FC,R5F104FD, R5F104FE,R5F104FF,R5F104FG,R5F104FH,R5F104FJ,R5F104GA,R5F104GC,R5F104GD,R5F104GE,R5F104GF,R5F104GG,R5F104GH,R5F104GJ,R5F104JC, R5F104JD,R5F104JE,R5F104JF,R5F104JG,R5F104JH,R5F104JJ,R5F104LC,R5F104LD,R5F104LE,R5F104LF,R5F104LG,R5F104LH,R5F104LJ,R5F104MF, R5F104MG,R5F104MH,R5F104MJ,R5F104PF,R5F104PG,R5F104PH,R5F104PJ,
	G1A	R5F10E8A,R5F10E8C,R5F10E8D,R5F10E8E,R5F10EBA,R5F10EBC,R5F10EBD,R5F10EBE,R5F10EGA,R5F10EGC,R5F10EGD,R5F10EGE,R5F10ELC, R5F10ELD,R5F10ELE,
	G1C	R5F10JBC,R5F10JGC,R5F10KBC,R5F10KGC
	G1E	R5F10FGC,R5F10FGD,R5F10FGE,R5F112GC,R5F112GD,R5F112GE,R5F10FLC,R5F10FLD,R5F10FLE,R5F10FMC,R5F10FMD,R5F10FME,
	I1A	R5F1076C,R5F107AC,R5F107AE,R5F107BC,R5F107DE,
	L12	R5F10RB8,R5F10RBA,R5F10RBC,R5F10RF8,R5F10RFA,R5F10RFC,R5F10RG8,R5F10RGA,R5F10RGC,R5F10RJ8,R5F10RJA,R5F10RJC,R5F10RLA,R5F10RLC,
	L13	R5F10WLA,R5F10WLC,R5F10WLD,R5F10WLE,R5F10WLF,R5F10WLG,R5F10WMA,R5F10WMC,R5F10WMD,R5F10WME,R5F10WMF,R5F10WMG
	L1C	R5F110ME,R5F110MF,R5F110MG,R5F110MH,R5F110MJ,R5F110PE,R5F110PF,R5F110PG,R5F110PH,R5F110PJ,R5F111ME,R5F111MF,R5F111MG,R5F111MH,R5F111MJ,R 5F111PE,R5F111PF,R5F111PG,R5F111PH,R5F111PJ R5F110NE,R5F110NF,R5F110NG,R5F110NH,R5F110NJ,R5F111NE,R5F111NF,R5F111NG,R5F111NH,R5F111NJ, PG support only (WS debug available seperately)
	LIN	R5F10LGA,R5F10LGC,R5F10LGD,R5F10LGE,
RX	110	R5F51101,R5F51103,R5F51104,R5F51105,R5F5110H,R5F5110J,
	111	R5F51111,R5F51113,R5F51114,R5F51115,R5F5111J,
	210	R5F52103,R5F52104,R5F52105,R5F52106,R5F52107,R5F52108,R5F5210A,R5F5210B,
	21A	R5F521A6,R5F521A7,R5F521A8,
	220	R5F52201,R5F52203,R5F52205,R5F52206,
	610	R5F56104,R5F56106,R5F56107,R5F56108,
	621	R5F56216,R5F56217,R5F56218,
	62G	R5F562G7,R5F562GA,
	62N	R5F562N7,R5F562N8,
	62T	R5F562T6,R5F562T7,R5F562TA,
	630	R5F56307,R5F56308,R5F5630A,R5F5630B,R5F5630D,R5F5630E,
	631	R5F56316,R5F56317,R5F56318,R5F5631A,R5F5631B,R5F5631D,R5F5631E,R5F5631F,R5F5631G,R5F5631J,R5F5631K,R5F5631M,R5F5631N,R5F5631P,R5F5631W, R5F5631Y,R5S56310, R5F5631MF,R5F5631PF (Debug Only Support)
	63N	R5F563NA,R5F563NB,R5F563ND,R5F563NE,R5F563NF,R5F563NK,R5F563NW,R5F563NY,
	63T	R5F563T4,R5F563T5,R5F563T6,R5F563TB,R5F563TC,R5F563TE,
RZ	RZ-A	R7S72100,R7S72101,R7S72102,
SH	SH2A	SH7201,SH7203,SH72165AD,SH72546RFCC,SH72611,SH72620,SH72630,SH72640,SH72690,SH7670,
	SH2	SH7047F,SH70834A,SH70844A,SH70854A,SH70865A,SH71242,SH71252,SH7144F,SH7145F,SH71464A,SH71491R,SH7615,SH7616,SH7618,SH7619,
	SH2a (No FPU)	SH7206,SH7211,SH7243,SH7285,SH7286,
	Other	CUSTOM_DEVICE_1,SH-2A_C_1C3A_3,SH-2A_C_1C3A_4,SH-2A_C_1C3A_5,SH-2A_C_1C3A_6, SH-2A_C_1C3A_F, SH_CUSTOM_MCU,SH2A_CUSTOM_MCU1, SH2A_CUSTOM_SOC_1,SH2A_CUSTOM_SOC_2,SH2A_CUSTOM_SOC_3,SH2A_CUSTOM_SOC_4,SH2A_CUSTOM_SOC_5, SH70835A,SH70835R,SH70845A,SH70845R,SH70855A,SH70855R,SH70865R,SH71243,SH71253,SH71464R,SH71494A,SH71494R,SH7214,SH72145AD,SH72145BD, SH72146AD,SH72146BD,SH72147AD,SH72147BD,SH7215,SH72165BD,SH72166AD,SH72166BD,SH72167AD,SH72167AD_Option,SH72167BD,SH72265,SH72266,SH72267, SH72275,SH72276,SH72277,SH72314L,SH72315A,SH72315L,SH72374A,SH72374B,SH72375B,SH72394A,SH72394B,SH72395A,SH72395B,SH72531,SH72531FCC, SH72531RFCC,SH72533,SH72533FCC,SH72543R,SH72544R,SH72546R,SH72612,SH7261_FPULess,SH72621,SH72622,SH72623,SH72624,SH72625,SH72626,SH72627, SH72631,SH72632,SH72633,SH72641,SH72642,SH72643,SH72644,H72645,SH72646,SH72647,SH72660,SH72661,SH72662,SH72663,SH72670,SH72671,SH72672,SH72673 SH72680,SH72681,SH72691,SH7606,SH7618A,SH7671,SH7672,SH7673, (Debug Support Only)

Integrated Code Generator Supported Devices:

CPU	Family	Devices
RL78	G10	R5F10Y14,R5F10Y16,
	G12	R5F10266,R5F10267,R5F10268,R5F10269,R5F1026A,R5F10277,R5F10278,R5F10279,R5F1027A,R5F102A7,R5F102A8,R5F102A9,R5F102AA,R5F10366, R5F10367,R5F10368,R5F10369,R5F1036A,R5F10377,R5F10378,R5F10379,R5F1037A,R5F103A7,R5F103A8,R5F103A9,R5F103AA,
	G13	R5F1006A,R5F1006C,R5F1006D,R5F1006E,R5F1007A,R5F1007C,R5F1007D,R5F1007E,R5F1008A,R5F1008C,R5F1008D,R5F1008E,R5F100AA,R5F100AC,R5F100AD, R5F100AE,R5F100AF,R5F100AG,R5F100BA,R5F100BC,R5F100BD,R5F100BE,R5F100BF,R5F100BG,R5F100CA,R5F100CC,R5F100CD,R5F100CE,R5F100CF,R5F100CG, R5F100EA,R5F100EC,R5F100ED,R5F100EE,R5F100EF,R5F100EG,R5F100EH,R5F100FA,R5F100FC,R5F100FD,R5F100FE,R5F100FF,R5F100FG,R5F100FH,R5F100FJ, R5F100FK,R5F100FL,R5F100GA,R5F100GC,R5F100GD,R5F100GE,R5F100GF,R5F100GG,R5F100GH,R5F100GJ,R5F100GK,R5F100GL,R5F100JC,R5F100JD, R5F100JE,R5F100JF,R5F100JG,R5F100JH,R5F100JJ,R5F100JK,R5F100JL,R5F100LC,R5F100LD,R5F100LE,R5F100LF,R5F100LG,R5F100LH,R5F100LJ,R5F100LK, R5F100LL,R5F100MF,R5F100MG,R5F100MH,R5F100MJ,R5F100MK,R5F100ML,R5F100PF,R5F100PG,R5F100PH,R5F100PJ,R5F100PK,R5F100PL,R5F100SH, R5F100SJ,R5F100SK,R5F100SL,R5F1016A,R5F1016C,R5F1016D,R5F1016E,R5F1017A,R5F1017C,R5F1017D,R5F1017E,R5F1018A,R5F1018C,R5F1018D, R5F1018E,R5F101AA,R5F101AC,R5F101AD,R5F101AE,R5F101AF,R5F101AG,R5F101BA,R5F101BC,R5F101BD,R5F101BE,R5F101BF,R5F101BG,R5F101CA, R5F101CC,R5F101CD,R5F101CE,R5F101CF,R5F101CG,R5F101EA,R5F101EC,R5F101ED,R5F101EE,R5F101EF,R5F101EG,R5F101EH,R5F101FA,R5F101FC, R5F101FD,R5F101FE,R5F101FF,R5F101FG,R5F101FH,R5F101FJ,R5F101FK,R5F101FL,R5F101GA,R5F101GC,R5F101GD,R5F101GE,R5F101GF,R5F101GG, R5F101GH,R5F101GJ,R5F101GK,R5F101GL,R5F101JC,R5F101JD,R5F101JE,R5F101JF,R5F101JG,R5F101JH,R5F101JJ,R5F101JK,R5F101JL,R5F101LC, R5F101LD,R5F101LE,R5F101LF,R5F101LG,R5F101LH,R5F101LJ,R5F101LK,R5F101LL,R5F101MF,R5F101MG,R5F101MH,R5F101MJ,R5F101MK,R5F101ML, R5F101PF,R5F101PG,R5F101PH,R5F101PJ,R5F101PK,R5F101PL,R5F101SH,R5F101SJ,R5F101SK,R5F101SL,
	G14	R5F104AA,R5F104AC,R5F104AD,R5F104AE,R5F104AF,R5F104AG,R5F104BA,R5F104BC,R5F104BD,R5F104BE,R5F104BF,R5F104BG,R5F104CA,R5F104CC, R5F104CD,R5F104CE,R5F104CF,R5F104CG,R5F104EA,R5F104EC,R5F104ED,R5F104EE,R5F104EF,R5F104EG,R5F104EH,R5F104FA,R5F104FC,R5F104FD, R5F104FE,R5F104FF,R5F104FG,R5F104FH,R5F104FJ,R5F104GA,R5F104GC,R5F104GD,R5F104GE,R5F104GF,R5F104GG,R5F104GH,R5F104GJ,R5F104JC, R5F104JD,R5F104JE,R5F104JF,R5F104JG,R5F104JH,R5F104JJ,R5F104LC,R5F104LD,R5F104LE,R5F104LF,R5F104LG,R5F104LH,R5F104LJ,R5F104MF, R5F104MG,R5F104MH,R5F104MJ,R5F104PF,R5F104PG,R5F104PH,R5F104PJ,
	G1A	R5F10E8A,R5F10E8C,R5F10E8D,R5F10E8E,R5F10EBA,R5F10EBC,R5F10EBD,R5F10EBE,R5F10EGA,R5F10EGC,R5F10EGD,R5F10EGE,R5F10ELC, R5F10ELD,R5F10ELE,
	G1E	R5F10FLC,R5F10FLD,R5F10FLE,R5F10FMC,R5F10FMD,R5F10FME,
	L12	R5F10RB8,R5F10RBA,R5F10RBC,R5F10RF8,R5F10RFA,R5F10RFC,R5F10RG8,R5F10RGA,R5F10RGC,R5F10RJ8,R5F10RJA,R5F10RJC,R5F10RLA,R5F10RLC,
	L13	R5F10WLA,R5F10WLC,R5F10WLD,R5F10WLE,R5F10WLF,R5F10WLG,R5F10WMA,R5F10WMC,R5F10WMD,R5F10WME,R5F10WMF,R5F10WMG
	F14	R5F10PAD,R5F10PAE,R5F10PBD,R5F10PBE,R5F10PGD,R5F10PGE,R5F10PGF,R5F10PGG,R5F10PGH,R5F10PGJ,R5F10PLE,R5F10PLF,R5F10PLG,R5F10PLH, R5F10PLJ,R5F10PME,R5F10PMF,R5F10PMG,R5F10PMH,R5F10PMJ,R5F10PPE,R5F10PPF,R5F10PPG,R5F10PPH,R5F10PPJ,
	F13	R5F10A6A,R5F10A6C,R5F10A6D,R5F10A6E,R5F10AAA,R5F10AAC,R5F10AAD,R5F10AAE,R5F10ABA,R5F10ABC,R5F10ABD,R5F10ABE,R5F10AGA,R5F10AGC, R5F10AGD,R5F10AGE,R5F10AGF,R5F10AGG,R5F10ALC,R5F10ALD,R5F10ALE,R5F10ALF,R5F10ALG,R5F10AME,R5F10AMF,R5F10AMG,R5F10BAC,R5F10BAD, R5F10BAE,R5F10BAF,R5F10BAG,R5F10BBC,R5F10BBD,R5F10BBE,R5F10BBF,R5F10BBG,R5F10BGC,R5F10BGD,R5F10BGE,R5F10BGF,R5F10BGG,R5F10BLC, R5F10BLD,R5F10BLE,R5F10BLF,R5F10BLG,R5F10BME,R5F10BMF,R5F10BMG,
RX	111	R5F51111,R5F51113,R5F51114,R5F51115,R5F5111J,

New features in 2.2:

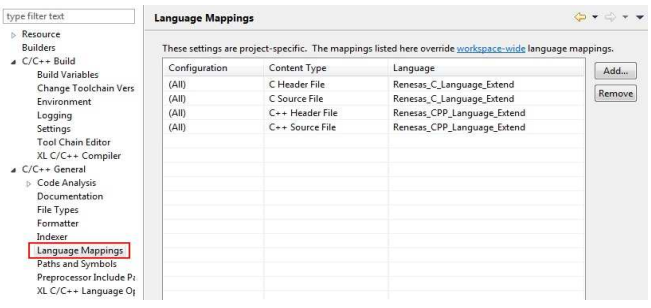
Component	Description
Smart Editor	For the RX111 and RX63N devices there is now a smart manual plugin which gives information on the IO registers on the device you are using. Therre is a plugin window which allows searching and viewing of data. In addition you can hover over IO register definitions within the editor and pop-up help can be displayed.
e2 studio Integration Service	A new interface has been added to the e2 studio that allows external applications to communicate with the application and drive simple features within the product. This is just the first version of this support and it will be expanded over future versions. Basic features in this version include project and debugger configuration management, simple debugger connection and execution and memory access. Please visit the e2 studio help system for more information.
Visual Expressions	Visual Expressions has had significant updates to allow more data types to be visually represented. Also some more controls have been added to the plugin such as the image widgit which allows you to specify a different image to display based on a variables value.

Important workarounds useful to know when using 2.2:

ID	Component	Description
NA	Application	If you are experiencing slow building of projects within e2 studio there are some possibilities to improve. The system environment will attempt to find the make.exe tool via the system environment. If you ensure the directory make resides in is at the start of the path variable it will find it more quickly. Especially important if there are network drives in the path. In the project properties, C/C++ Build tab, behaviour tab you can switch on parallel build. This will take advantage of the mult-cores on your host machine if it has them. In 2.1 this now defaults to on for new projects.
2010	HEW Importer	Symptoms: Project fails to build after import from HEW Conditions: If a long filename or path is used, and the HEW project importer is used, the project may fail to build. Workaround: Move the original HEW project to a shallow directory structure (i.e.) C:\Workspace and import from there. Also ensure that the HEW project is relocated before importing into e2 studio.
2421	Application	Debug configurations have been modified in e2 studio 2.x. So although you can re-use the workspace and projects from e2 studio 1.x when you open the debug launch configuration for the first time it is updated. Before doing this you should back-up the .launch file if you need to keep a 1.x version.
	Application	It is not possible to import e2 studio 1.x projects which are for the V850 device into e2 studio 2.0.
1922	Application	Symptoms: Project fails to build in first instance after archive project import (not from HEW) Conditions: If an archived project is imported it may fail to build the first time, due to a residual .d file. Workaround: Clean and Build a second time.
2762	Application	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully. We do not have a workaround for this at this time.
2728	GDB	Step into does not always work when using the CCRX 1.02.01 toolchain. To ensure this behaves correctly you will need to use CCRX 2.00.00 as this issue with the debug information is corrected in this release.

	Eventpoints	If eventpoints do not always work just after they are set, you can use the "Apply to Target" toolbar button in the Eventpoint view to send the Eventpoints to the target manually. This will always ensure the debugger target has all the required eventpoint updates before execution starts.

Fixed in 2.2.0.13

ID	Component	Description
2868	Application	In some situations it takes two attempts to add an include folder to the options. On the first effort the include path is not added.
2978	GDB	When using the CCRX compiler, when a function parameter is a register variable, the value of variable is incorrect in first line at main function.
3171	GDB	In RX610, IPL of the PSW register is incorrect in registers view. Number format of register view is Default. When PSW is set to 0x2000000 (-->IPL=2), The display of PSW is as follows. PSW #25 --> should be #2.
3172	GDB	In RX610, RM of FPSW register is incorrect in register view. RM of FPSW register is 2 bit (bit0 and bit1), e2 studio displaies RM of FPSW as 1 bit. RM = 0x00 -> [ ] RM = 0x01 -> [RM] RM = 0x02 -> #1 RM = 0x03 -> [RM #1]
3285	HEW Project Converter	Include paths added in HEW were not imported correctly following import into e2 studio.
3319	Application	When importing a project into the user's workspace if the files have read-only permissions the import will not work correctly. Workaround is to ensure that all Eclipse project files are writable in the source project directory.
3383	IAR plugins	When using the IAR RX toolchain. The __sfr keyword causes warnings in the e2 studio editor despite it being valid syntax.
3553	Application	Dependency scanning was not working correctly for linked resource files which contain spaces.
3616	Real-time Chart	Sometimes the chart view will appear to add a series on the first connection, but it is not visible. Deleting the series using "Delete series" from the chart context menu and adding it again appears to resolve it.
3631	Application	If the Performance view is reopened, it will not be updated by the next Performance measurement results. Keeping the view open is the workaround to this problem. Or opening and then re-starting the debug session.
3649	Event points plugin	Function eventpoints on external files not presented as source code annotations.
3737	Application	Some new RX devices such as the R5F563NFDxFC are not currently supported by the Renesas RX Simulator.
3765	Application	Linkage Order: Newly added file should be added at the last position in Linker order list.
3803	GDB server RX	Terminating when running can sometimes cause the Renesas RX Simulator to crash.
3821	Application	Trace capacity is not set up correctly for the RX Simulator when you have previously used and modified the trace capacity for the E20.
3843	Real-time Watch	Realtime enables monitoring on variable of same name in a structure. e.g. If variables d and ss are added to Expressions view and real time refresh is enabled on variable d, ss 's member variable d also shows 'R' against it.
3859	Coverage plugin	It is possible to enable coverage when using the RL78 E1 debugger when it is not supported. Doing so will cause an exception.
3893	HEW Project Converter	PDG added files do not get added to an imported HEW project.
3923	Application	e2 studio projects that contain Japanese characters do not import correctly when exported as Renesas Common Project File. When importing into CubeSuite+ an error is shown.
3941	Project Generation	RL78 F13 and F14 device support updated.
3991	Application	After importing an e2 studio 1.x project into e2 studio 2.1 an error message is displayed saying MCU Information is not available and the memory usage view does not function for that project. On the context menu of the memory usage view or the smart manual view you can activate a wizard to select the device correctly for older projects.
3995	Application	When debugging with RX it is possible to terminate the debug session by pressing the re-start button multiple times quickly.
4004	Visual Expressions plugin	The Dial element in Visual Expressions view does not allow to correctly set the min/max values of the dial's display.
4010	Application	The active configuration of a project is not restored correctly when the project is closed before shutting down e2 studio.
4014	Visual Expressions plugin	On the properties dialog in Image element of Visual Expressions view, clicking OK may not close the dialog if the browsing of a custom icon has been cancelled.
4024	Application	Edited or newly added events are now automatically applied immediately even before the target is resumed. This ensures the labels are evaluated to an address when the event is added and avoids the "Save to Target" button needing to be pressed before execution begins.
4025	Application	When importing a project where the toolchain is in a different location to when the project was originally created the active build configuration is reset.
4044	Visual Expressions plugin	Changing the number-format of an element in Visual Expressions view whilst the target is suspended does not immediately update the expression's value.
4055	GDB	In some situations when debugging RX the Interrupt vector table is offset by -32 bytes (The 1st vector at 0xFFF949A8 is downloaded to 0xFFF94988). This is occurring on all RX debuggers, E1/E20, JLink & Simulator. But not with the GDB Simulator.
4085	CDT	Expanding binary files in RL78 throws exception.
4113	Trace plugin	With the trace view it is not possible to load the saved trace data from 2.1.
4119	Visual Expressions plugin	Some Visual Expressions elements such as Gauge does not fully support unsigned-char data type.
4135	Application	<projectname>.lib and <projectname>.lbp in a CCRX CubeSuite+ library project are not converted correctly when importing from CubeSuite+ to e2 studio.
4148	Application	RX Debugger's for RX631 has a problem which means you cannot access the external SDRAM.
4152	Application	When a clean operation is performed the standard C run-time library is not cleaned.
4170	Visual Expressions plugin	In Visual Expressions view the Label element does not always display an expression correctly when its number-format menu is set to display "String" number-format.
4179	Application	The R5F110PJ (RL78/L1C) is listed as unsupported in the Renesas Device Support List even though it is actually supported.
4208	GDB server RX	e2 studio with the E1 and RX63N does not work correctly when SDRAM and hardware trace is enabled.
4257	Application	Re-start only works once for debug configurations created manually.
4262	Application	Accesses to IO Registers in CCRX projects can show Syntax Error in the editor. To fix these warnings add the following Language Mappings to the project settings: * "C Source File" & "C Header File" to "Renesas_C_Language_Extend" * "C++ Source File" & "C++ Header File" to "Renesas_CPP_Language_Extend" 

4268	Real-time Chart	Real time chart updates are not running properly on V2.2.0.11. When an expression is added to the chart view for the first time in a debug session, it does not display correctly (a straight line at 0 is shown). When the series is edited (by changing the line colour for example) then the expression begins to be shown correctly.
4275	Application	In some situations the clean operation does a build before performing a clean. One example is if you press clean twice on the second clean a build is performed first.

Fixed in 2.1.0.23

ID	Component	Description
3958	CCRX Build Plugin	When a project which is imported from Cubesuite+ with e2 studio version 2.0 is then built after upgrading or importing it to e2 studio 2.1 a link error occurs.
3967	CCRX Build Plugin	When using a CCRX 2.0 project which is then opened in 2.1 the -rom option is not handled correctly.
4072	Application	The Active build configuration is lost in some situations when e2 studio is closed and re-opened.
4073	Application	Projects created in e2 studio 1.x must be updated before the Memory Usage view can be used for them. Use the "Upgrade legacy projects..." action in the Memory Usage view menu to update e2 studio 1.x projects.

Fixed in 2.1.0.21

ID	Component	Description
16	Application	When debugging Segger J-Link application using RX, at the first (invalid) breakpoint, it shows incorrect values for global variables.
41	Application	Register values have incorrect initial values when using the RX Simulator or RX hardware debugging. Initially, R0 values are same as ISP in E2S whereas R0 values are same as USP in the HEW environment. R0 is alias to USP. Later on the R0 values are same as ISP / USP depending on the stack usage. Incorrect Accumulator value is displayed (i.e, Accumulator is 0, when checked on command line as well, gdb does not update accumulator values). This is a RX Simulator issue.
110	Application	e2 studio needs permissions to write to the installation directory. This is a standard Eclipse problem however you may experience issues registering your toolchains or performing updates if you do not have administration access when using directories with restricted access.
373	GDB server	e2 studio does not support debugging using multiple E1 emulators connected to the system. There is no way to select which emulator you would like to connect to.
392	GDB server RX	When using a brand new RX62N RDK with the Segger J-link if the board is brand new you cannot connect to the device the first time. The second time if you use the debug button on the debug configuration page and press debug instead it works correctly.
398	GDB server	FMtool for Romless devices not implemented. In the debugger settings in HEW you choose a mot file and address which then gets downloaded during the connection process. This is not implemented in e2 studio. This will be supported for SH only in 1.1.
652	Application	Custom debug configuration. Warning message to be generated if custom.bat is empty Test case : to check if the default settings of predefined Custom Debug launch configuration are correct. Steps: 1. Create a project for custom debug configuration. Select Custom Debug' on 'Select default debug settings' page while creating the project. 2. Don't update custom.bat with any path. 3. Build the project 4. click debug icon. If user has not specified any path in custom.bat and clicks the debug button, user should get warning message that file is empty.
663	Debug Configuration	When changing the project in the debug configurations tab - a dialogue appears asking if changes want to be saved regardless of whether changes have actually occurred.
822	Project Generation	org.eclipse.cdt.ui is delayed due to common utilities instantiated. Toolchain validation holds up the loading of org.eclipse.cdt.UI which the IAR plugin depends upon. If this is delayed the IAR plugin will not start up causing the editor to fail with exceptions. Registering toolchains and then restarting should remedy the problem.
831	Real-time Watch	Record sometimes saves blank file. When using the record feature in the real-time expressions view the saved file is sometimes empty.
846	Application	HEW debug fails for RX200, RX63N. HEW debugging templates do not exist for RX200 and RX63N.
919	Application	UTF-8 Input character code (-utf8 option) and output character code (-outcode=utf8) are being set in dialogs but not being passed to the compiler at build time. These codes can only be applied in conjunction with C99 option, but even when selected, still does not work.
936	Application	Duplicate Address is allowed in Linker->Section for GNURX and other targets.
938	GDB server	Program Execution not stopping for Event Break OA eventpoints using IECube with RL78.
1131	GDB server	"Add Watchpoint" from Variables window context menu crashes the debugger. In the latest e2 studio the crash no longer occurs however watchpoints do not work.
1417	Application	e2 studio aborts on startup if too many hardware breakpoints have been specified. NOTES: 1: The boundary of the problem is on setting 4 hardware breakpoints. 2: That problem reported by the dialogue box talks about software breakpoints, when the option to use only hardware breakpoints has been selected. 3: The debug session must be setup to use only hardware breakpoints. 4: For SH2/SH2A targets in general, there does not seem to be any direct relationship between the maximum number of hardware breakpoints supported by the target and the number of preset breakpoints required to cause the problem. However that said, the issue is consistantly activated when the number of preset breakpoints is either the same as the maximum supported by the hardware or one or two less than this figure. This may be due to the data held in the target descriptors of the GDB server.
1422	GDB	When debugging some RX projects, after hitting some breakpoints the session hangs while retrieving stack data & the session must be terminated. The same module downloaded and debugged though HEW does not display this issue. Comparing the two it appears GDB is attempting to load more stack levels than actually exist.
1649	Application	When using Data Access eventpoints (on SH target hardware) specifying "Not Equals" for an address mask has no effect. The default of "Equals" is always used.
1651	Application	SH data access events points must stipulate word width as byte, word (16bit) or long (32bit). Therefore the option 'Not Specified' is not permitted.
1674	Application	GUI is using the wrong limit on the number of pass counts for the SH7216. The pass count being reported by the GDB server is 4096. But the GUI is not even allowing a pass count of 1.
1675	Event points plugin	GUI not permitting 32 bit data mask value (e.g. ffffffff) to be set for the SH 7216 target, reporting invalid data mask.
1717	RX build plugin	There is no UI support for customizing the linkage order.
1726	Application	E1RL78 Connection can fail. Failure to connect can be caused if an area of flash used by the debugger gets corrupted. This can be worked around by setting the debugger configuration / connection settings tab option "Erase Flash ROM When starting" to Yes. Once connection is established OK, the option can be reset to No.
1744	Application	No entry of Hello world project under Executable project.
1750	HEW Project Converter	The HEW project importer does not import the linkage order from HEW. e2 studio does not have the facility to define the linkage order.

1769	Application	SHC: 'Output file type':-code=asmcode differences for per file v/s project settings.
1786	SH build plugin	The range button is available on the Eventpoints Data Access Settings tab of an OA address point even though these eventpoints are unavailable on the SH target.
1792	GDB Server SH	Trace Fill until Full or Stop has no effect for some SH targets. Defaulting to "Fill until stop".
1802	GDB Server SH	Unable to apply SH OA event point when Compare Settings chekbox is checked.
1806	GDB server	There is currently a limit of 11 to the stack trace depth that will be shown in the Renesas Debug View. This can be increased to n by executing the command from the GDB console: set backtrace limit <n>
1840	Application	Every now and then (in this case after switching project), when building a project has been completed, the build progress bar hangs indicating that the build is still in progress when clearly it is not.
1847	Debug Configuration	Unable to create a project for the following target in project generation Toolchain : GNUSH v12.01 Target : R5F71374FPV Emulator : E10A SH2
1863	HEW Project Converter	HEW makefile project import in not supported in e2 studio 1.1.
1912	Trace plugin	Trace: Find destination address does not work due to case sensitivity.
1932	Application	From the memory view, the memory load feature does not work for reloading data into external flash.
1940	Real-time Watch	Deleting 1 of 2 instances of an expression being monitored in real time, takes the second instance out of real time monitoring mode.
1951	Application	If you import a v850 debug-only project with a debug configuration and attempt to either debug the project; you will get problem occured message which will say "Unknown Debug Hardware 'E1 (V850)"'. E1 (V850) hardware is not available in e2 studio 1.1
1954	Profile plugin	Profile address filter throws number format exception. Enter a valid address e.g. FFF8006E, into the filter which is listed within the profile view. If unsuccessful the follwoing exception is raised: ava.lang.NumberFormatException?: For input string: "FFF8006E"
1965	GDB server RL78	RL78 IECUBE performance appears less than CubeSuite+ and the E1 in e2 studio
2030	Application	Linker Section UI : Move Down button is disabled for the first element from any section.
2082	HEW Project Converter	HEW importer when using SHC Renesas compiler. The linker option "-show=total_size" is passed extra in e2 studio as compare to HEW following conversion.
2196	GDB Server SH	AND/SEQUENCE eventpoints cannot be created but possible to change an existing OR eventpoint to AND/SEQUENCE with SH72643 target.
2279	Application	Scanning is invoked when any header file is modified, even if this header file is not actually used by the compiler due to conditional exclusion.
2336	GDB server RX	The e2 studio debugger is preventing the RX family MCU from entering low power states following a disconnect operation.
2364	Application	If entering a special character in a build configuration name such as '%' it can cause a build failure.
2441	Installer	Installation can fail if the path you are installing into exceeds the max path. e2 studio has some quite deep directories so a initial installation directory over 30 characters fails.
2447	Application	Attempting to load a file via the "Load Ancillary File" toolbar button fails when the specified file path contains spaces. In such cases, a dialog is displayed with the message: "Error: Invalid character '\' in expression"
2530	Application	Following an import the toolchain version is changed. (Upgraded) The toolchian is upgraded but the paths to include directories are not changed to reflect the new toolchain.
2556	GDB server	When using CCRX for a poject the debugger like E1 cannot display double size variables. When the project is built using GNU for RX double data is displayed without problems in the Expressisons window.
2561	Application	If user changes the default path of the toolchain to a custom path for an older project, it still considers the older path instead of new path during project build. You need to visit the build options, clean and then rebuild to resolve the problem.
2589	Application	When using the ${workspace_loc} placeholder in include paths, if the workspace location has spaces in it the editor cannot resolve the include directories correctly. It shows a '?' icon next to the #include statement despite it building correctly on the command line. Moving the workspace to an area without spaces resolves the problem.
2650	Application	Dependency scanning does not work for library template projects(GNU and Renesas) when using conditional includes.
2705	Performance Analysis	Perfomance Analysis values presented for RX seem to be elapsed cycles no matter what is configured.
2742	RX build plugin	In some instances CODAN errors are shown for valid code. This is due to the #define in source files not being picked up correctly by the e2 studio indexer. To avoid the issue if you add the #define to the build options the CODAN errors will be removed. Or alternatively you can switch off CODAN.
2751	GCC Toolchain Installers	In some instances the library generator "libgen" can crash and fail to build the library. This is sometimes the case when you have an old project and change changed the toolchain. The root cause is mixing of paths. e.g. Using 13.01 toolchain but the path is picking up libgen from 12.01 for example. Changing the toolchain version to another one and changing back resolves the toolchain path problem and should then continue to work correctly.
2765	GDB server	Program suspending on a performance start eventpoint.
2772	Application	In some situations even when unchecked toolchains are still registered into the e2 studio environment.
2776	Application	Debugger console did not show all output when the debugger was suspended. Some output is buffered and not displayed.
2885	Debug Console plugin	Enabling and disabling debug console multiple times can stop it working.
2898	GDB server	No performance timers are obtained using RX simulator.
2918	Debug Console plugin	Enabling and disabling the debug console more than once can stop output being shown in the window.
2935	Application	The Resume at startup option, on the Debug Configurations, Startup tab, Runtime Options does not work correctly. If checked it will causes e2 studio to loose control of the target. Do not use this option. leave the checkbox unchecked.
2940	GDB server	In certain cases OA Event Break eventpoints will not stop program execution on an RX210 target, one known case is when the OA eventpoint is created after an Execution Address eventpoint has been created
2966	Application	Macros defined in the build options are not always recognized by the e2 studio indexer. This means that unnecessary Codan errors are displayed.
2969	Performance Analysis	E20 shows performance results even when timer is set to OFF.
2970	Performance Analysis	E20 shows performance results even when timer is set to OFF.
2987	Application	When using a RH850 debug only project, build throws an exception.
2988	Project Generation	When using the RH850 debug only project type. The launch configuration is not specifying the correct application. Meaning an error is displayed "No binaries founds".
2993	GDB Server RH850	Writing memory to the RH850 data flash does not work correctly. It may result in not all bytes being written.
3002	Application	When using a debug only project. Pressing the build button throws an exception. This happens for RH850, RX, SH and RL78 debug only projects.
3006	Application	In certain situations the toolchain registration dialog is displayed even though the toolchains were registered last time.
3010	GDB Server RH850	When using the RH850 debugger there are issues with step into and step return which do not work correctly. For example step into does not step to the first instruction in the function.
3011	GDB	Step return fails when debugging RH850 projects.
3013	Application	When using the RH850 debugger the run to line feature does not work correctly. Sometimes the break will occur but one source code line below the selected line.
3035	GDB Server RH850	When using the RH850 debugger software breakpoints are not supported.
3036	Application	When debugging and using hardware breakpoints by default the user is not informed when the hardware breakpoints are exhausted and subsequent breakpoints are converted to software breakpoint types.
3040	GDB server RX	e2 studio does not have the ability to configure the SDCS# Chip Select for RX62N and RX63N.
3046	GDB server RX	At downloading, unmarked blocks in the Flash Clear option are not cleared but should be cleared.
3049	Application	External SDRAM is not supported in RX62N and other RX series. In extended mode 'SDCS' external memory area needs to be added to Debug configuration dialog for 'N' series chips or any others that support.
3050	Application	When building with Link-time optimizations enabled (-flto) the linker command line changes from rx-elf-ld to rx-elf-gcc. This is expected. However when the Enable Link-time optimizations option is selected, the compiler is invoked instead of linker and all the options are required to be prefixed with '-Wl,'. Currently the '--oformat elf32-rx-be-ns' options are not prefixed with '-Wl,'. Hence an error is displayed.
3058	Application	RH850 Event Break (data access) is not supported.
3061	Application	When using trace and the RH850 debugger when using the the Dissassembly view and Instruction Stepping Mode" a single step is performed. Some additional commands relating to the debugger were included in the trace output. Only the instruction "add r15, r1" should only be displayed.
3063	Application	When using the E20 debugger it is possible for the profile feature to timeout. When the trace mode is Fill until Full and the Trace Output selection is used.

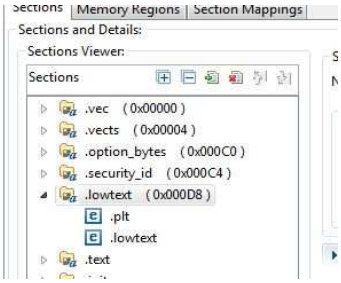
3107	Application	RX Cannot set OA event point if 4 or more PC eventpoints set.
3108	GDB server	Trace capacity shown as 1MB when no trace buffer exists (i.e. E1).
3110	Application	When a CubeSuite+ common project format file is imported to e2 studio, excluded resource information is not converted.
3156	Application	When debugging with the E1 and EX the power supply from the E1 emulator does not stop when the connection with the emulator failed.
3158	Application	The display of the value of the data trace is wrong in the trace window.
3159	Application	When creating a new project in e2 studio for RX (GNU toolchain) two memory regions are defined by default (ROM/RAM). But when creating a new project in e2 studio for RL78 there are no memory regions defined. By default the .bss section is set up to follow after the .data section (which has a fixed address) but if the .data section is empty the .bss sections ends up following other sections like .plt which is at a much lower address. Defining memory regions like for RX will stop the .bss the be placed at a much lower address even when the .data section is empty.
3164	Application	Currently it is difficult to identify which plug-ins in e2 studio CDT original and which are Renesas created. Help should be updated to make this identification easier.
3165	Application	Saving trace data cannot be interrupted even though it can take a long time to complete the operation.
3170	Application	The debug connection process can fail when connecting to a target with a different endian to previous connection.
3174	Application	It is not possible to set a correct value to the ACC register via the register view when debugging with RX.
3177	Application	When debugging with RX, when the value of 0x80000000 or more is set to Mask Value of DataAccess event, an error is displayed.
3178	Application	Register Windowï¼š 1.Open the register window. 2.Execute the program. 3.Select the context menu [Watch] of Register window. This causes the window to become unresponsive and hang.
3200	Application	RL78 real time support no longer limited to 16 bytes.
3206	Project Generation	Default GNURL78 projects should secure OCD Monitor Areas.
3207	CCRX Build plugin	When using the Renesas C compiler (CCRX) C source files cannot be compiled as C++ files.
3210	Application	When importing CubeSuite+ projects into e2 studio the RX CPU mappings are not correct.
3216	Application	CubeSuite+ common project export should include more file types as project files. Request is to include .pdf, .txt, .doc, .docx, .xls, .xlsx, .ppt and .pptx.
3224	Application	When uninstalling a previously registered toolchain and then installing and registering it again at a later date the toolchain is not registered correctly the second time.
3265	Application	In some situations delete all does not work in the eventpoints view. Even when eventpoints appear to be deleted they are restored when the debugger session is re-started.
3268	CCRX Build plugin	When using the CCRX compiler, the ".cc", "c++" and "cxx" files are not recognized as valid C++ source files. (.cpp)
3273	GDB Server RH850	RH850 Register View shows 'Multiple errors reported.' when scrolling down the register view. This is caused by some registers being requested by GDB that were not defined.
3284	CCRX Build plugin	When using the Renesas CCRX toolchain. The linker is invoked when project is re-built without any source file changes or without visiting the build options. No source files are built but the linker is run unnecessarily.
3286	GDB server RX	RX600 does not output Data records for Trace, even if Data is selected in the Trace Acquisition dialog
3302	Application	When using the external trace buffer with the E20, trace data cannot be acquired.
3401	Performance Analysis	Performance Analysis timer default is off, with no visual indication. Clearer visual indication is required of the timer state.
3420	GDB Server RH850	When debugging RH850 it is not possible to view the contents of the Data Flash in the Memory View. The view always displayed '??' for all memory within that region.
3444	HEW Project Converter	For large .x files originating from large CCRX Renesas compiler projects it can cause the rx_converter.exe to crash.
3479	Application	When trace acquisition is set to record read and write data access only reads are saved. This is for the E1 with the RX111.
3524	Application	Profile view had some problems with the filters meaning that valid filters were returning no records.
3577	Trace plugin	E20 project contains incorrect trace acquisition settings when created for the first time. E20 Trace options are disabled (Trace Output and Trace Capacity).
3620	Application	The program counter is not updated correctly following a reload of the program being debugger. It should be at the reset vector but is instead it remains at the location before reload. This is just a visual issue.
3632	Application	Saving trace data takes too long when there are many trace records to be saved. Especially in the case of the Renesas RX simulator and E20 debugger.
3647	Application	When debugging with RX, if the PC counter is at the Excep_BRK() and the debugger is in sleep state. Further step executions can cause the debugger to crash.
3675	Application	When using CCRX the value of bit of union is not updated in the expression window.
3691	Application	Unexpected additional includes while building GNU Project. Any included source directories are appended to the beginning of the include path list. These should not be added.
3729	GCC Toolchain Installers	New toolchains may register but also require enabling on the Toolchain Managment dialog to allow use

Open issues in 2.2.0.13

ID	Component	Description
17	IO view plugin	There are some IO Registers where the same memory address holds 2 registers with difference access sizes. These registers are general a read-only register and another register used for writing which is write-only. These registers are currently all listed as R/W in the IO Map file and so the view will attempt to display values for the wrote-only registers. When it does this the bytes are displayed reversed.
40	Application	The message "Error: Unable to create variable object" is sometimes shown during debugging when stepping out of functions.
72	IO view plugin	All IO registers for RX devices are listed as Read/Write? in the IO xml files used by the IO view, even though some are read or write only.
220	GDB server	e2-server-gdb executable currently causes a security alert in Windows when executed for the first time. The publisher is currently undefined also. Accepting the dialog allows normal operation to proceed.
301	Trace plugin	Trace buffer full functionality needs addition. New checkbox needs adding to the GUI.
364	Application	In case of MinGW toolchain projects - Whenever you add any include path in the compiler / assembler include path option, it is displayed in the Project Explorer -> <prj_name> -> Includes. In case of KPIT / Renesas toolchain projects - Whenever you add any include path in compiler / assembler include path option, it is not displayed in the Project Explorer -> <prj_name> -> Includes. It only displays the default include paths added during project generation. The include paths are shown in the build option preferences as you would expect.
419	Project Generation	When using the project generators some settings are not remembered correctly when moving forward in the wizard and then stepping back. The 'CPU Type' information is not saved, while some of the additional options are remembered and some not.
452	Trace plugin	Trace view - save and load trace data. When trace data is saved the save dialog defaults to .xml extension rather than .rtt. This means that the saved data is not loaded back into the view. Also the load dialog defaults to .xml, but does not load the trace data back into the trace view regardless of the file type. Illegal trace files are not flagged as non standard trace files as per requirements.
475	GDB server RL78	Once a debug session has been terminated when using an IECUBE another connection is not possible until the IECUBE had been unplugged from the machine.
478	Event points plugin	Clicking on column headers in Eventpoints view does not order entries.
480	Event points plugin	Unable to add eventpoints using the insert key.
482	Event points plugin	Browse (...) remaining disabled on Eventpoints view. Open the Eventpoints view. Double click on the Event Break eventpoint category. Select OR in the Trigger combo box. Click Add on the Edit Trace dialog. Click on the ... button alongside the Address text control. A dialog should appear with a list of address labels but the ... button remains disabled
525	GDB server	When Move to Line is used with RX targets the program is resumed from the selected line, the expected behaviour is that the program would remain suspended.
540	GDB server	When the refresh interval is <120 msecs the Realtime views are not updating. First observed in Realtime Expressions, but will probably affect Chart and Memory too. Inreasing the refresh interval to 200 msecs is a workaround.
549	Application	When entering address, compare and mask values for an eventpoint, hex digits are assumed. The dialog should assume field values are decimal unless prefixed by a modifier such as
567	Real-time Chart	It is not possible to edit series name in the real-time chart view.
628	Application	When instruction stepping into code, PC is sometimes not correctly placed. When this happens the home button does not restore the PC location correctly. Clicking the current stack frame in the Renesas debug view does remedy the issue.
722	Trace plugin	Using Find on "Address" allows the entry of a case insensitive hex number. However on "Destination Address" a case sensitive string is required. This needs to be made clearer on the
785	Trace plugin	Bus mode records sometimes fail to update if rapid cycling through the available trace modes.
789	Trace plugin	The trace plugin data field if find & filter is set does not remember its value. When reopened the data option has both fields populated with a numerical number not entered by the
803	GDB server	RL78 program execution stopping on 'Equal' when 'Not Equal' is specified in the Comapre Settings.
811	GDB server	Trigger Count not supported for RL78 but is still available in the Eventpoint View.
816	GDB server	Data Access mask not working for address values for RL78. Program execution stops each time the address is accessed no matter what value it contains.
820	GDB server	Address mask not working for RL78. Program execution does not stop, expecting to see program execution stopping everytime we access an address ending in e8.

873	Debug Configuration	No Renesas GDB hardware launch shortcut for IAR & Green Hills plugins. Launch shortcut needs manual creation.
874	Event points plugin	Execution Address Eventpoints with trigger count do not work with Breakpoints on Segger RX. Setting an execution address eventpoint with a trigger count on Segger JLink RX62N is not possible if any breakpoints exist, including the default at main. If an execution address eventpoint with a trigger count is set with a breakpoint both the eventpoint & the breakpoint do not function. Multiple breakpoints are set then only 1 does not work. Additional eventpoints function as normal.
877	Debug Configuration	IOView is populated for the incorrect target for debug-only projects. If you open the debug configuration dialog the IOView is populated with the correct target information.
879	Trace plugin	Find and filter are greyed out after closing trace view. The only way to activate find and filter options is to resume debugging and suspend.
887	Trace plugin	Trace address filter end range value gets set to the start range after reopening dialog.
909	Application	Selecting "Inhibit all warning messages" does not disable advanced warnings.
930	GDB server	Unlimited number of Event Break eventpoints allowed on RL78 devices
934	Event points plugin	Eventpoints view toolbar label not updating for RL78 eventpoints.
935	GDB server	RL78 G14-2 only allows one Event Break eventpoint
987	Application	Exporting project if linker sections are modified and not saved generates an error. Resource not synchronized is the message.
1065	Application	Build console arrows (Next and previous) does not work as expected. On selecting 'Next' arrow, the listed errors are not scanned/visited through.
1103	Debug Configuration	The V850E JTag Break Option - 'stop emulation of peripherals when stopping' has not been implemented in the debugger options.
1263	Application	RX200 CPU selection should not be supported for toolchains =< 1.00.01 for the CCRX Renesas toolchain. This toolchain does not support RX200
1352	Application	GNU Linker section : Deleting section using delete button (keyboard) does not work.
1460	Application	Project builds, but rx_convertor.exe fails when on network drive.
1485	Application	The edited address value in Memory window does not highlighted in red but does update.
1486	Application	Breakpoint properties do not work when set in the CDT dialogs. For example using the filter operation and removing the breakpoint for the process being debugged.
1523	HEW Project Converter	HEW import page is displayed even when user tries to import normal project (other than HEW project).
1531	Application	The edited value in Expressions window is not highlighted. The expressions are not updated in the following circumstances: 1. When editing in-place within the expressions window. 2. Modifying the value of the expressions in the memory window. 3. When the target suspends and the views refresh.
1532	Application	The edited value in Registers window was not highlighted when modifying the value in the registers window. The edited value should be yellow highlighted. Note: This appears to work for the first edited register okay following a target suspend. However any subsequent modifications are not highlighted.
1595	Application	Renaming a project using the right click menu in the project explorer causes its respective debug configuration to disappear.
1616	RX GCC build plugin	The options of a Build Configuration were not correct after specifying Multiple Configurations... functionality.
1640	Application	After creation a project cannot be deleted straight away. If the user waits around 30 seconds the project can then be deleted.
1642	Application	Erase flash on startup option on RL78 should be executed once. When e2studio connects successfully to RL78 target and erases the flash, this option should return to false, so that flashing is not done everytime target is connected.
1645	Event points plugin	For the SH7216 target (and most likely other targets), when using the address conditions and associated mask, the boolean parameter (parameter 17) 'address mask compare type' is
1742	Debug Configuration	When the project has been selected to use SH. The user is prompted to select the launch configuration on clicking 'run'. The launch configuration should be automatically selected
1778	Application	When setting the 'Internal Flash Memory Overwrite' debug option, it is possible to exceed the maximum number of non-continuous memory blocks supported. No warning is given if this limit is exceeded. When setting this option ensure the limit (16 for RX devices) is not exceeded.
1790	Real-time Watch	Real-time expression settings are not saved when the application exits.
1801	Application	Debug configuration button does not show last configuration. The tooltip shows "Debug RX630E" but when the button is pressed "RX62T" is launched, and "RX62T" is the one at the head of the list also.
1807	Trace plugin	While source mode is enabled on the trace view if you swap or cycle to another view, before returning to the trace view. The contents of the view will be removed. To obtain the source view again please follow these steps: Enable Bus mode on the trace view, disable source mode on the trace view, renable source mode and then disable Bus mode.
1808	HEW Project Converter	Import a HEW RX project in e2studio using the HEW project importer. Check : Project > Properties > Compiler > Source > Include file directories. Paths are duplicated
1841	HEW Project Converter	Importing HEW project generates warning in e2studio for 'src' directory.
1846	HEW Project Converter	HEW Importer: Compiler > Warnings > Advance > Enable All check-box is not mapped. All warnings checkboxes are checked as expected, however the 'Enable All' option is not checked.
1859	GDB server	Program execution stops inside a range when Range Exclusive is specified in the address settings for OA event points.
1889	Application	Due to file extension issue with .s and .S and due to known bug, e2studio users wont be able to use .s or .S effectively to pre-process assembly files that need GCC. Hence we suggest renaming these files to use: .S -> .asm .s -> .src
1891	Application	When an RX hardware debug session is executing the reset button can be operated but does nothing. In RL78 the debugger is reset correctly.
1904	Profile plugin	Profile view: Go to source throws an exception if no file path is defined in profiler.
1927	Event points plugin	Trace Record execution address eventpoints are allowed with e2Studio, these are not available with HEW, should only allow Trace Record eventpoints of type data access to make
1936	Coverage plugin	When using the IECUBE for RL78 the source lines for coverage are not being highlighted correctly in some cases.
1950	HEW Project Converter	This results in the following error message "The selected .hwp file overlaps the location of another project". See attached dialog. This is because when the project is removed from the project tree the Eclipse projects are not physically removed. Deleting the Eclipse project files from the directory allows the operation to continue.
1982	RX GCC build plugin	For Renesas CCRX the Converter phase gets invoked even when using the external linker subcommand option. This should not happen.
2010	HEW Project Converter	HEW Project Import fails to build file due to File or path name too long. This is due to the difference between HEW and Eclipse. In HEW object files are output to the configuration directory. In Eclipse the files are output alongside the source file in the same directory.
2044	Trace plugin	Source/Disassembly not being displayed after trace view is opened. Toggle off and on the Source Mode button and source is now displayed and view continues to behave correctly there on.
2059	RX GCC build plugin	Linker Section Editor - Need to conditional Enable / Disable the UI buttons. 'Add button' is not disabled when user selects contents (Label, Expression or Keyword) inside the section. When user clicks on add button, when Label, Keyword or expression is selected, nothing gets added.
2081	Application	After building a project if user changes anything in linker subcommand file option, only ObjCopy is gets invoked. Linker should get invoked.
2156	Application	When using the profile window, for SH72643, the 'execution time' and 'average execution time shows negative values for the first time only after which it runs normally.
2161	Application	Software breakpoints are not supported on targets that use external flash to run application. Also, in this case 'force Hardware Breakpoints'(In Debug tool settings) set to 'No' by default. A warning message should be displayed while trying to set software breakpoints in such cases.
2193	GDB Server SH	Reload of code for SH devices with external flash does not work. Instead, disconnect and reconnect.
2278	Application	Wrench is not displayed after a file's build settings are modified. This is a generic CDT issue.

2299	RX GCC build plugin	It is possible for .c and .C files to be treated in the same manner in certain situations which is not correct. (.C extension is changed to .c during project build).
2390	RX GCC build plugin	Exception is generated when all sections are removed from Linker UI.
2416	Project Generation	Use of duplicate register is allowed for RXC project generation. 1. Create RXC project 2. Go to RXC Global option page, select "ROM" -> "R8" 3. Select the same value for any other register (e.g. "RAM" -> "R8"), it gives error message and prevents the user from project creation. 4. Now select "R8" again for "RAM" register. It doesn't show any error message and allows user to create the project.
2440	Application	If you delete a src folder and add it again with the same name it gets excluded from the build. Click on the project and examine the source directories to add it back in.
2486	Profile plugin	Acquiring profile results can take a very long time following RX Simulator debugging.
2537	Performance Analysis	Performance Analysis: Performance time is not updating following changes to start and stop performance addresses.
2544	GDB	RX Simulator has max of 246 events (256 - 10 reserved for eventpoints). Set beyond this limit will return an error and the GUI displays a yellow warning triangle. However press resume (F8) and no existing BP's work and cannot suspend, just terminate.
2576	GDB	Using RPBRL78L12 and GNURL78 v13.01,attempting to step into a C function call within an assembly file (reset_program.asm) results in a step over.
2636	Application	Visiting build options and clicking on 'OK' rebuilds already built GNUSH executable/library c/c++ project.
2651	Application	Library Template : Build fails when spaces are present for file or folder name.
2657	Application	When importing a configuration from another project when building a "File not found" exception is shown when the user tries to import external linker file. Creating the file inside the project directory should solve this issue.
2667	GDB	When using a big endian target, areas of memory not covered by the download module are considered little endian. This causes problems when viewing disassembly and memory.
2671	GDB server	in e2studio for an application created by RL78 GNU compiler is the corresponding source code of RESET vector seem to be not found first and therefore a file with the info text 'No source available for "(gdb[12].proc[42000].threadGroup[i1],gdb[12].proc[42000].OSthread[1]).thread[1].frame[0]" ' is displayed. Debugging can continue normally after this.
2693	Application	HEW Importer, output file(.P/.PP) is not generated while building the project. Workaround : User will need to select Settings -> Compiler -> Object -> output file type -> Preprocessed source file -> OK after importing the project and then build the project.
2696	Application	RL78 cannot step over empty for loop.
2716	GDB server RL78	Before PC events on IECube temporarily hard coded limit of 4.
2735	Trace plugin	When using an IECUBE emulator saving large trace buffers can fail to complete.
2739	Application	e2studio editor typing profiles will be changed so that spaces are used instead of the Tab character to generate Renesas target device source code.
2755	Event points plugin	Timer Value for Performance Start/Stop Eventpoints not being persisted.
2762	Application	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully.
2859	IAR plugins	When using IAR projects the SFR names (e.g. PIOR1_bit.no1) are not understood correctly in the editor.
2881	GDB	Step over and step return do not work on SH2 70865.
2903	GDB Server SH	Step return does not work on SH2A 72691.
2910	GDB	Registers do not display properly on SH2A 72691.
2930	GDB server	It is not possible to power the RH850 board via the E1 debugger in the current release.
2934	GDB server	When using Performance Timer Eventpoints with RX Simulator, eventpoints must be manually applied from the Eventpoints view before resuming.
2948	GDB server	Trace is not returning any records on first run from PowerON_Reset to main() with Segger J-Link.
2963	GDB	When debugging an IAR RX project you may get an error rebuilding your project while debugging. As a workaround if you press "reload" before rebuilding, your project will be re-built
3017	GDB Server RH850	The "Show Opcodes" feature within the Disassembly window does not work correctly. This affects all targets.
3039	Application	When exporting a project that has external linked folders rather than files which are resident in a source directory they lose their directory structure in the exported archive. When
3054	Application	Real-time refresh will not update visually for a complete structure. The workaround is to monitor individual members of the structure.
3059	Register plugin	The Find feature of the registers view does not work.
3160	Application	The address of pointer type variable can not be modified in Expressions View. e.g. typedef int* PI; PI s_pi = &glb; In this case, address value of s_pi can not be modified in Expressions View.
3179	Application	The setting of the Performance Analysis dialog is not saved.
3331	Application	When using an external build system to build a project, the Image Reload notification is not displayed when the image file is modified. This reload notification is only launched for the
3389	Application	When debugging files with the same name show source addresses even though it may not be correct for the file in question. The full file path is not considered just the filename and
3410	GDB Server SH	SH2-70865A - clicking step-in when on the closing brace of a function will cause the server to run, but never respond again. The only option is to terminate.
3411	GDB Server SH	when using SH2-78865A, right click in the gutter bar and select Toggle BPC Evntpoint to set breakpoints at the specified locations. One will set successfully but more than one will fail.
3412	Application	'Execute The User Program After Ending The Debugger' should not be enabled when the target is powered internally. This can cause the debugger to hang.
3430	Application	Select all in the registers window does not work correctly. It only selects the visible registers. This is an issue in standard Eclipse Juno.
3447	Application	Using the copy register functionality in the register window sometimes copies the incorrect register information to the clipboard.
3450	Application	Select all and copying the registers to the clipboard does not work correctly. This is also the case in the generic version of Eclipse Juno.
3470	Application	When debugging with the RX210 the FPSW register is displayed on the register view. This should not be the case as the RX210 does not have the FPSW register.
3472	Application	When changing the PC value in the registers window the PC display is not modified in the e2 studio editor. This is just a visual refresh issue. Stepping causes the views to update and step occurs from the new location.
3476	Application	When finding registers in the IO view the result of the search is not highlighted but the view is scrolled.
3490	Real-time Watch	If a data type of a variable already displayed in the expressions view is updated, e.g. from char to long, after a re-build the expression view data type is is not updated. However the data value is correct. Closing the debugger or e2studio does not clear the issue but clean does.
3526	Application	In some cases when using RX with the CCRX compiler the profile view does not display the source file name and path in the window.
3550	Application	Custom placeholders are not expanded when importing a project from HEW. This is currently expected behavior but may be improved in a future version.
3585	Application	The GDB server crashes when an E1 emulator is connected to a debug configuration configured for the Segger emulator.
3625	Application	When using the Snapshot trace feature the data mask settings are not applied correctly.
3626	Application	Snapshot trace - adding IO register eventpoints increases the data shown in the trace view, but as they were removed there was no change in the data shown.
3657	Application	If e2 studio is installed into a directory where any segment of the file path contains a space then the memory map plugin information cannot be retrieved for any target.
3663	Application	With 2 targets connected, clicking between the two debug contexts in the Debug View will update the source addresses in the open Editor files. However changing debug context does not seem to get detected if clicking on the top-level of the debug context rather than on the lower level.
3754	Application	Trace Start and Stop eventpoints not being sent down to target in time. Making event point changes and then executing can result in them being missed the first time. To avoid this you can use the "Apply to Target" toolbar button in the eventpoints window.
3788	Application	RL78 Stack pointer register cannot be changed from registers view.
3795	Trace plugin	Saving RX Simulator trace data to the disk can take some time due to the number of records obtained from the server.
3797	Trace plugin	Creating a new save file to save data will not display the job in the foreground. Overwriting an existing trace file will show the progress dialog in the foreground.
3798	Trace plugin	Creating a new trace file for E20 trace data takes a long time to complete due obtaining disassembly data for all the available records. During this period of obtaining disassembly data the debugger controls can become unresponsive.
3804	Application	The code generator is not automatically registered when installing into generic Eclipse. Browse to the CG plugin and then run the batch files that reside in the tools directory. e.g. C:\Renesas\e2_studio\eclipse\plugins\com.renesas.cg_1.0.0.201309061659\CodeGenerator\Tools
3808	GDB server RX	When using 2 RX simulator debug configurations in parallel the debugger does not work correctly. Stepping and breaking does not work well.
3813	Event points plugin	OA event break event points not breaking at correct addresses on SH7203 (External Flash) target.

3815	GDB server RL78	Trace Record Eventpoints not working for IECube.
3822	Event points plugin	'Delete All' is enabled in eventpoints window even when there is no eventpoints.
3832	CodeGenerator plugin	Building an example using the code generator and selecting the "Generate hardware setup" in C caused the project to not build as the file iodefine.h is missing. At V2.1, the workaround is to remove the file "hardware_setup.c" when creating a project.
3836	Application	Dependencies with file name that have spaces may cause dependency scanning issues. Where possible it is better to avoid using spaces in dependency file names.
3841	Application	When setting MBS > Compiler > Optimize >Advanced, option 'inter-module' for 'Optimization for access to external variables' it causes a re-build every time.
3847	Application	When using the display as array feature in the expressions window it appears that data can be skipped and is not updated.
3860	GDB	When modifying the PC on RL78 when leaving the register in the format 0xFF <main+xx> it fails. If you remove the <main+xx> and just pass through a valid hex string it works fine.
3867	Application	When the current configuration is set to a custom configuration created by the user. The configuration following an export and import into another workspace is not restored correctly. It is restored to HardwareDebug.
3909	CCRX Build plugin	In case "Inter-module" is specified in Compiler/Optimize/Advanced/Optimization for access to external variables, "make.exe" process continues to run after build process is finished
3928	CCRX Build plugin	By default the e2 studio editor character code is set to UTF-8. This means it is possible to enter characters that are then not supported by default by the CCRX toolchain. CCRX default input is SJIS. To enable UTF-8 for the toolchain you must first select C99 support.
3932	Application	If e2 studio is installed into the desktop folder or the workspace is within the "My documents" area on Japanese operating systems, the object converter can fail to execute correctly.
3945	Application	When importing a HEW project if it contains folders with the same name at the same hierarchy then not all the files will import successfully. i.e. "....\WorkSpace\WorkSpace\Developments\src\embOS\Util\MEASUREMENT.c" "....\WorkSpace\WorkSpace\Developments\src\protocols\util\SerialUtil.c"
3950	Application	Breakpoints cannot be unset within the editor when code is #ifdef out. These breakpoints will need to be removed from the breakpoints plugin.
3960	Application	The GDB Python library is missing from the RH850 GDB executable. As a work around the 'gdb' library from "\gdb\python\lib\" within a GDB source drop can be placed in DebugComp\Lib\. Without this full Python scripting will not be available.
3992	Application	When importing projects from HEW into e2 studio when the files are read only, build errors occur following import. Ensure the files are writable.
4007	Visual Expressions plugin	The properties dialog for Image element in Visual Expressions view accepted a minus (-) sign in edit fields which are Hex, Octal and Binary number-formats. Also when using Hex, Octal and Binary formats for number ranges, the ranges will be converted using long data-type rather than int data-type.
4026	RX GCC build plugin	When building with GCC if the compiler command line options string exceeds 8192 characters it is truncated and may not work correctly. If you encounter this issue - please try using a shorter path for the root of the workspace you are building.
4056	Coverage plugin	After running a debug session with coverage on the whole file then a number of green indicators are displayed in the editor view as expected. Close e2studio and restart. The green indicators still remain even though there is no connection, coverage is disabled and no coverage address ranges or file specified in the Coverage View. The only way to clear the file coverage indicators is to right click in the middle gutter and select "Clear Coverage Markers".
4104	Application	When the project is re-named. If the user then uses the feature project > Build Configurations > Build All. The active configuration builds successfully but subsequent configurations
4105	Application	When using GCC on Japanese Windows. If you create a new workspace on the desktop the default GCC projects fail to build correctly.
4116	Profile plugin	The loaded profile results in Profile View are shown on the right-hand side even when the View Loaded Data menu item is NOT selected.
4129	Project Generation	FPU option is not set correctly for GNURX (RX200/RX100) executable project. "Disable generation of RX hardware FPU instructions" option should be checked and grayed out for
4132	Real-time Watch	When using Real-time Debugging, a memory value is acquired per byte. Therefore in some cases the wrong value will be displayed if two or more bytes of a variable are displayed in real time.
4140	Application	Performing a clean operation twice in succession for the CCRX toolchain performs a build and then a clean on the second clean operation.
4150	Project Generation	Working sample debugger support is removed after updating the product version. To re-enable the WS support please copy the files back into the product from the original archive.
4169	Visual Expressions plugin	Large unsigned numbers can cause problem for some elements in Visual Expressions view.
4174	Application	When browsing for a toolchain in the add toolchain dialog in toolchain management if you use the context menu to paste the path into the dialog, the add button is not enabled. The workaround is to use shift + insert or Ctrl + v via the keyboard. This will enable the button.
4176	CCRX Build plugin	The Renesas CCRX toolchain fails to build projects with the following conditions: a. Project name with Chinese characters b. Project located in a path with Chinese character c. Project contains file with Chinese character
4189	Application	It is not possible to build project which has more than 98 characters in its project name.
4191	GDB server RX	When using Segger JLink, with the "Force Hardware Breakpoints" debug option enabled, adding more than the maxiumum amount of breakpoints for a deivce and then removing some can lead to none of the breakpoints firing. Workaround is to add a single breakpoint back in to trigger the reapply of all others.
4213	RX GCC build plugin	It is not permitted to use the tool chain editor on the Settings pages to attempt a conversion from GCC to CCRX or CCRX to GCC. This conversion is not permitted and may stop your project working correctly.
4219	Project Generation	When building a GNU RL78 project with more than 64K of code relocation truncated linker errors may occur. Add additional linker section should be added ".lowtext". This section needs to contain the expression ".plt" and have a fixed address of 0xD8. The existing ".text" section should be modified to follow on from this new section. 
4223	CodeGenerator plugin	RL78/L12 group of MCUs (RL78 family) The setting of Key interrupt flag and Detection edge may not be saved. When saving the project after making the new setting and then reloading the project, the setting reverts to the original setting as the new one had not been saved. After reloading the project, check that the setting of Key input interrupt is the same as the setting which was made before reloading.

4224	CodeGenerator plugin	RL78/G1A group of MCUs (RL78 family) The Conversion time mode of the Conversion time setting may not be saved. When saving the project after making the new setting and then reloading the project, the setting reverts to the original setting as the new one had not been saved. After reloading the project, check that the setting of Conversion time mode is the same as the setting which was made before reloading.
4225	CodeGenerator plugin	RL78/L13 group of MCUs (RL78 family) When the timer KB20 is in use, the settings for Standalone mode (period controlled by external trigger input) and Interleave PFC (power factor correction) output mode may prevent the correct output of the API functions. Make settings in Code Preview so that the following API functions are output manually. - R_KB20_Create - R_KB20_Start - R_KB20_Stop - R_KB20_Set_BatchOverwriteRequestOn - R_KB20_TKBO0n_SmoothStartFunction_Start - R_KB20_TKBO0n_SmoothStartFunction_Stop - R_KB20_TKBO0n_DitheringFunction_Start - R_KB20_TKBO0n_DitheringFunction_Stop - R_KB20_TKBO0n_Forced_Output_Stop_Function1_Start - R_KB20_TKBO0n_Forced_Output_Stop_Function1_Stop
4226	CodeGenerator plugin	RL78/G10 group of MCUs (RL78 family) When generating code corresponding to the gcc compiler, date information is outputted to the version comments box in the function header of the r_cg_reset_program.asm.
4246	Application	When "${workspace_loc}/FreeRTOS_ftpd_RSK_RX63N_rev100/src/ANSI" is specified in the include option, it is not able to be expanded in project explorer. ${WorkspaceDirPath} macro works well.
4251	CodeGenerator plugin	RX111 group of MCUs (RX family) When CodeGenerator is added to RX111 project, an extra node appears under CodeGenerator node at Project perspective tree. Nothing is performed at the node.
4280	Integration Server	The GetExpressionS function in the Integration Server will in some cases return an invalid string. Workaround is to use the ReadMemory call to get the raw data.
4295	Application	The position of the eventpoint within the source window is wrong in case it is defined via an offset (e.g. dummy_fkt_2+4 ...)
4300	Real-time Watch	Modifiying the name of a variable in the Expressions window may cause a prompt asking if the new variable should be made realtime aware (even if the old one was not)
4304	Application	Output file name cannot be changed in "Build Artifact" setting.